

CLAIMS

What is claimed is:

1. A method for securing access to a keyboard driver in a host computer, wherein said host computer includes a host processor that manages communication between said keyboard driver and a keyboard attached to said host computer, said method comprising:

receiving a packet on a bus that provides a communication medium between said keyboard and said host computer; and

setting an input secure bit only in response to determining that said packet originated from said keyboard, wherein said set input secure bit is subsequently utilized to access said keyboard driver from said host processor.

1 2. The method of claim 1, further comprising reading
2 said input secure bit to determine whether or not said
3 keyboard driver may be accessed by said host processor.

1 3. The method of claim 1, further comprising:

2 detecting if said input secure bit has been read;
3 and

4 in response to detecting that said input secure bit
5 has been read, clearing said input secure bit.

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1 4. The method of claim 1, further comprising scanning
2 packets on said bus during operation of said host
3 processor.

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1 5. The method of claim 1, wherein said keyboard
2 includes a keyboard controller for receiving and
3 responding to keystrokes from said keyboard, and wherein
4 said method further comprises determining whether said
5 packet originated from said keyboard controller.

1 6. The method of claim 1, further comprising
2 determining a device address of said keyboard upon
3 initialization of said keyboard with respect to said host
4 computer.

1 7. The method of claim 6, wherein said step of
2 determining a device address further comprises:

3 reading an address field of said data packet;

4 determining whether or not said address field
5 matches said keyboard device address; and

6 in response to determining that said address field
7 matches said keyboard device address, setting said input
8 secure bit.

1 8. The method of claim 6, wherein said bus is a
2 Universal Serial Bus (USB) such that said keyboard is
3 identified by a USB device address, said step of
4 determining a device address further comprising reading a
5 USB address field of said packet.

1 9. The method of claim 8, further comprising assigning
2 a unique USB address to said keyboard.

1 10. A system for securing access to a keyboard driver in
2 a host computer, wherein said host computer includes a
3 host processor that manages communication between said
4 keyboard driver and a keyboard attached to said host
5 computer, said system comprising:

6 processing means for receiving a packet on a bus
7 that connects said keyboard to said host processor;

8 processing means for determining whether said packet
9 originated from said keyboard; and

10 processing means responsive to determining that said
11 packet originated from said keyboard for setting an input
12 secure bit that is read by said host processor to
13 selectively provide access to said keyboard driver in
14 accordance with verification that said keyboard
15 originated said packet.

1 11. The system of claim 10, further comprising:

2 processing means for detecting if said input secure
3 bit has been read; and

4 processing means responsive to detecting that said
5 input secure bit has been read for clearing said input
6 secure bit.

1 12. The system of claim 10, further comprising
2 processing means for scanning packets on said bus during
3 operation of said host processor.

4 13. The system of claim 10, wherein said keyboard
5 includes a keyboard controller for receiving and
6 responding to keystrokes from said keyboard, and wherein
1 said system further comprises processing means for
2 determining whether said packet originated from said
3 keyboard controller.
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5 14. The system of claim 10, further comprising
6 processing means for determining a device address of said
1 keyboard upon initialization of said keyboard with
2 respect to said host computer.
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1 15. The system of claim 14 further comprising:

2 processing means for reading an address field of
3 said data packet;

4 processing means for determining whether or not said
5 address field matches said keyboard device address; and

6 processing means responsive to determining that said
7 address field matches said keyboard device address for
8 setting said input secure bit.

1 16. The system of claim 14, wherein said bus is a
2 Universal Serial Bus (USB) such that said keyboard is
3 identified by a USB device address, said system further
4 comprising processing means for reading a USB address
5 field of said packet.

1 17. The system of claim 16, further comprising
2 processing means for of assigning a unique USB address to
3 said keyboard.

1 18. A system for securing access to a keyboard driver in
2 a host computer, wherein said host computer includes a
3 host processor that manages communication between said
4 keyboard driver and a keyboard, said system comprising:

5 a processor for analyzing traffic on a bus that
6 connects said keyboard to said host computer, wherein
7 said processor identifies packets that originate from
8 said keyboard; and

9 an input secure bit that is set in response to said
10 processor identifying a packet originating from said
11 keyboard, wherein said input secure bit is utilized by
12 said host processor to provide selective access to said
13 keyboard driver.

14 19. The system of claim 18, wherein said host computer
15 is a Universal Serial Bus (USB) host that includes a USB
16 host controller, and wherein said bus is a USB that
17 provides USB connectivity between said keyboard and said
18 host processor such that packets transferred on said USB
19 conform to USB transfer protocol.
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